

Stacey Champion  
[sc@champion-pr.com](mailto:sc@champion-pr.com)  
602-788-0033

October 29, 2019

Arizona Corporation Commission

Re: DOCKET No. RU-00000A-19- 0132 & Docket E-00000A-19-0128

IN THE MATTER OF PROPOSED MODIFICATIONS TO THE RULES REGARDING TERMINATION OF SERVICE, ETC.

Dear Commissioners and Staff,

I am submitting these comments, research and resources to express my ongoing frustration over this Government body's feet dragging over many months in seeking the assistance and input from public health experts and scientists with regard to indoor heat related deaths and additional matters related to the termination rules – both emergency and permanent. Please note this recent article by Elizabeth Whitman for reference:

<https://www.phoenixnewtimes.com/content/printView/11377138>

I would also like to add that prior to my current business, I was a Certified Indoor Environmentalist (CIE) for a number of years, and my area of expertise was indoor air and environmental quality. Though this in no way makes me a public health expert, hence my push for you to engage true public health experts, epidemiologists, scientists and others, it does assist me in understanding the research and data.

I believe this (heat related deaths) is one of, if not the biggest, public health crises currently facing our state. Let us not forget APS had more than 110,000 shutoffs in 2018, the first full year the rate hike was in effect, and at least one person died as a result, which is why we are here today. We also wouldn't know many of these things without myself and others submitting numerous public records requests to uncover these truths, which is a far cry from transparency and regaining the public's trust.

Our most vulnerable residents (infants and children, elderly, pregnant women and chronically ill) are at the highest risk, as well as the large percentage of people in our state who are living in poverty. As an example, 24% of Arizona children are food insecure, and all of this ties directly to bill burden, as energy bills here in Arizona (and especially for APS ratepayers) are often the second highest expense for people after their rent/mortgage payment.

This ties directly to my second concern, which is utility deposits. What APS originally told this Commission, what they are now instead doing, how deposits are applied or not applied, potentially not returned, and/or are regularly handled is something this Commission needs to investigate and properly regulate/oversee in a meaningful way, both right now tied to the moratorium, as well as moving forward.

## HEAT

On October 17<sup>th</sup>, Chairman Burns submitted the following into this Docket:

"Based on comments received at the Commission's September 30, 2019 workshop, regarding the referenced subject, I would like to propose for consideration the following modifications to the Commission Staffs ("Staff") revised proposed rules that Staff filed on September 26, 2019. "Will include temperatures that are equal to or less than 39" F" Rule R14-2-211(A)(10)(b) should read as follows: "Will include heat indexes that are equal to or greater than 99 F" Using the heat index will require that a new definition be added to the definitions section of the rules that reads as follows: ""Heat index" means the measure of how hot the air feels to a person, based on the actual air temperature and relative humidity, as determined by the National Oceanic and Atmospheric Administration, National Weather Service, heat index chart included herein as Exhibit A" (The heat index chart can be found at: <https://www.wrh.noaa.gov/psr/general/safety/heat/heatindex.png>)"

In an arid climate like Arizona, using the heat index alone will not benefit public health and safety, as there are numerous days where our relative humidity is extremely **low**, which means you could see **actual** temperatures of 105 deg. + with a heat index of 99 F. Viewing the heat index chart submitted by Chairman Burns, his proposed 99 deg. heat index, even with extremely low relative humidity, would put everyone in the "**extreme caution**" range, which surely can't be the intent of this Commission whose job is to ensure the safety of Arizona residents – especially our most vulnerable citizens.

Like ACC Staff pulling 105 degrees out of a utility-worn top hat, this proposal for a 99 degree heat index does not make sense, was not supported by public health and science experts, and is once again not data-driven policy. It may be beneficial to add a heat index to air temperature to cover the monsoon season, but if so, based on the data and to prevent the most illness and deaths, it would need to be set in the 80 - 85 heat index range to be beneficial. **I continue to stand behind a 90 degree air temperature shutoff threshold based on the research and data and also what was used for [SB 1542](#).**



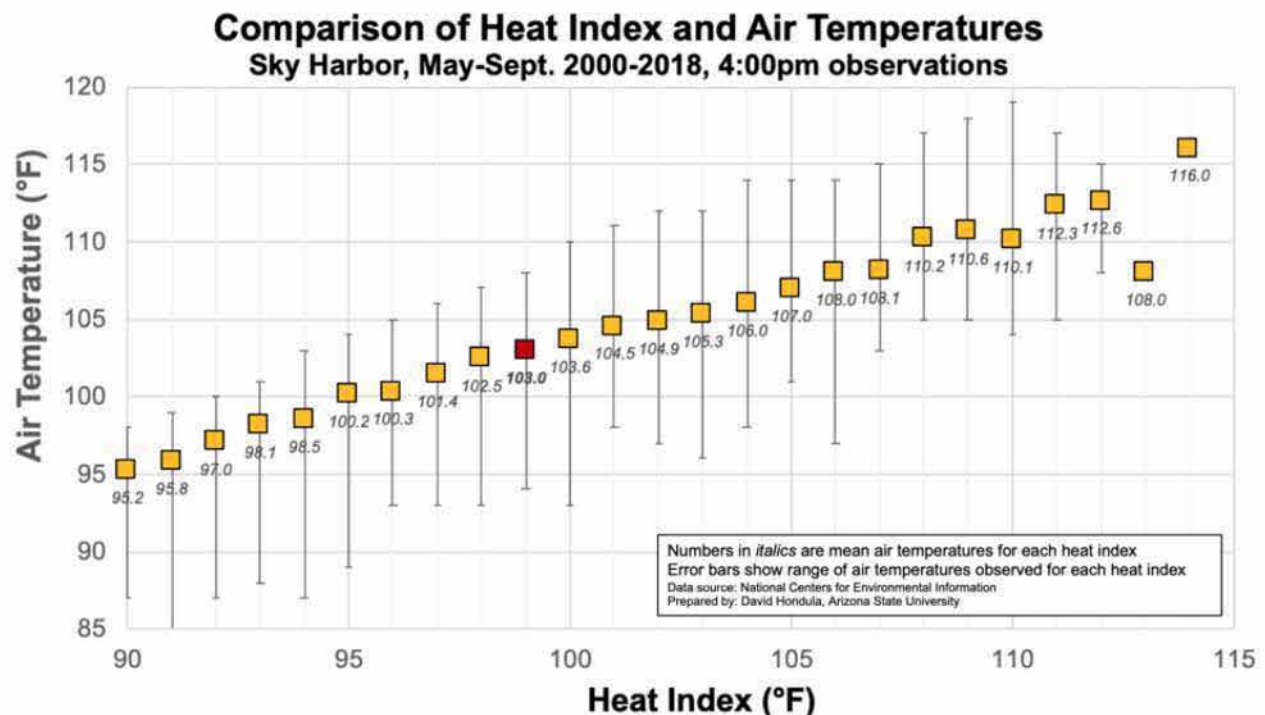
According to ASU's David Hondula, Ph.D., prior ASU analyses suggest that air temperature is just as good as, or better than, heat index to predict health outcomes related to heat exposure. He also supplied me with the following information and data:

Data:

- 19 years of hourly observations from Sky Harbor airport (2000-2018)
- 4pm observations (approximately the hottest time of the day)
- May-September

Key points:

- During the summer, the 4pm heat index is, on average, 3.4 degrees F lower than the 4pm air temperature (because of the low humidity)
- When the 4pm heat index is 99 degrees, the average 4pm air temperature is 102.97 F (rounded to 103.0 on the figure below)
- When the 4pm heat index is 99 degrees (which happened 166 times during this 19-year period), the 4pm air temperature was at or above 105F 66 times (40%)
- The 4pm air temperature has reached 108F 8 times when the 4pm heat index was 99 degrees
- The proposed 105 F air temperature threshold is reached on ~36% of days between May and September. A 95 F air temperature threshold is reached on ~83% of days between May and September. A 99 F heat index threshold is reached on ~51% of days between May and September. (Based on 4pm observations only).



### Further research on heat:

The following is from the Arizona Registrar of Contractors. Though it relates to worker safety, take note of the temperatures and consider that these are risks assigned to healthy, able-bodied workers.

### **CDC, OSHA: Heat Stress Risk Starts at 85 Degrees Fahrenheit** **Dive Brief:**

- After an analysis of 25 OSHA heat-related illnesses — 14 fatal and 11 nonfatal — the Centers for Disease Control [suggested that employers start screening\(link is external\)](#) their workers for heat stress when the heat index reaches 85 degrees Fahrenheit rather than the 91 F [OSHA currently recommends\(link is external\)](#). Heat stress covers a wide variety of potential illnesses, including life-threatening heat stroke.
- The CDC's review was intended to test its own National Institute for Occupational Safety and Health's recommended occupational exposure limits, which take factors like levels of heat acclimation, the type of work clothing and worker predisposition to heat illness into consideration in a real-world setting. Of the 25 cases being analyzed, six fatalities occurred when the heat index was less than 91 F, and four fatalities occurred when the heat index was between 85 F and 90 F. Heat index screening should be used when the wet bulb globe temperature method is unavailable. The wet bulb globe temperature method measures the heat stress in direct sunlight via temperature, wind speed, humidity, sun and cloud cover.

Source: <https://roc.az.gov/newsarticle/cdc-osha-heat-stress-risk-starts-85-degrees-fahrenheit>

### **The following is from A/C Is An Essential Need: Arizona Tenant Rights With Air Conditioning.** **Take note of the following temperatures and information:**

#### **Do landlords need to provide air conditioning in Arizona?**

Under Arizona law, landlords must provide a rental unit that has fully operating appliances and is safe to occupy. This law includes offering what are considered “essential services.”

Arizona statute [Title 33-1364\(A\)](#) defines an “essential service” as:

*“running water, gas or electrical service, or both if applicable, and reasonable amounts of hot water or heat, air conditioning or cooling, where such units are installed or offered.”*

Some parts of Arizona have specific standards that apply. **For example, in the city of [Phoenix](#), rental units that use air conditioning cannot exceed a maximum temperature of 82 degrees. Evaporative coolers are allowed a slightly higher maximum temperature (86 degrees).**

While these temperatures may seem excessive, when the mercury soars to 100 degrees or more, or a dust cloud forces you to close your windows during the hottest part of the summer, indoor temperatures can climb quickly to much higher levels. Arizona law requires that rental



units be [safe, fit, and habitable](#). It is also important to note that even if renters are not up to date on their rent, landlords are not allowed to cut off utilities to “punish” tenants (as per Arizona statute [Title 33-1374](#)). This potentially deadly action is illegal and unconscionable. Source: <https://arizonalegalcenter.org/arizona-tenant-rights-with-air-conditioning/>

**The following is from a report from Union of Concerned Scientists titled *Killer Heat in the United States*:**

However, rising numbers of heat-related deaths in places such as Phoenix, Arizona—where we might expect residents to be accustomed to the heat—suggest that warming temperatures and a range of socioeconomic factors (such as access to functional air-conditioning, age, and race) require greater consideration when defining the local risk posed by extreme heat (Maricopa County Public Health 2017; Hayden, Brenkert-Smith, and Wilhelmi 2011; Stone, Hess, and Frumkin 2010). And while access to ubiquitous air-conditioning has been shown to reduce heat-related mortality, true physiological acclimatization to heat requires consistent outdoor daily exertion over an extended period of time. The facts of this process suggest that constant access to air-conditioning may preclude acclimatization (Nordio et al. 2015; Acosta 2009).

**Heat index conditions as low as 80°F can affect human health. Extreme heat exposure affects people differently depending on their health and environment. Certain groups of people may become more susceptible to heat-related illness as the heat index rises.**

When extreme heat conditions prevent our bodies from adequately cooling, our core temperatures rise, causing a variety of symptoms (see Figure 3). This can be made worse by the environment surrounding us—a blacktop playground with no shade, for example, or a room with no air-conditioning—and by underlying health conditions. During heat waves, calls to emergency medical services and hospital admissions rise (Davis and Novicoff 2018; Zhang, Chen, and Begley 2015; Dolney and Sheridan 2006; Medina-Ramón et al. 2006). Cooler nighttime temperatures typically provide relief from a hot day and give our bodies a chance to cool down, but **when nights remain hot, health risks rise, especially for those without access to air-conditioning or for whom the choice of turning on the air-conditioning presents difficult financial trade-offs (Anderson and Bell 2011) (see chapter 5, p. 22).** The longer our bodies remain overheated, the greater the risk of heat-related illnesses (such as heat cramps, heat exhaustion, and heat stroke) and the greater the risk of death (CDC 2017b; Choudhary and Vaidyanathan 2014).

With heat cramps, people experience cramping or pain in the stomach, arms, or legs as a result of excessive sweating that causes loss of large amounts of salt and water from the body. Heat exhaustion can cause dizziness, a weak pulse, nausea, and fainting. The most severe heat-related illness, heat stroke, can occur when the body’s core temperature rises from its usual 98.6°F to 104°F or higher. High body temperature is associated with increased heart and

respiratory rates and, at extreme levels, damage to the brain, heart, lungs, kidneys, and liver (Seltenrich 2015). This can be fatal (CDC 2017b). Without cooling, heat-related deaths can occur quickly— typically the same day or the day after outside temperature spikes—which signals the need for a quick response to extreme heat conditions by public health officials and either the people exposed or their caregivers (Anderson and Bell 2011). However, health impacts from heat can also occur one or more days after the exposure to extreme heat, and each additional consecutive day of extreme heat increases heat related mortality rates (Chen et al. 2017; Hajat et al. 2006). While one-day heat events are enough to raise the rates of heat-related illness, longer heat waves are more likely to have a larger effect on a variety of adverse health outcomes (Basu et al. 2012). In addition to deaths caused by heat-related illness, extreme heat conditions increase rates of heart attacks, cardiovascular mortality, and respiratory mortality (Mastrangelo et al. 2007; Medina-Ramón et al. 2006; Braga, Zanobetti, and Schwartz 2002; Curriero et al. 2002).

### **Child Bodies**

Infants and small children are among the most susceptible to heat-related illness. As temperatures climb, smaller bodies lose water at a faster rate than larger bodies do, which can lead to dehydration (Stillman 2019; Li et al. 2015). Physiologically, children have a higher ratio of body surface area to mass and a lower total sweating rate compared with adults (Rowland 2008; Bar-Or 1994). The latter can lead to a slow acclimatization to heat. Children are also less likely to read their body cues and know they need to rehydrate (Rosman 2017). Extreme heat can also increase the incidence of allergy attacks, electrolyte imbalance, fever, and kidney disease in children (Xu et al. 2012).

### **Elderly Bodies**

People aged 65 and older—and especially 75 and up—have an elevated risk of heat-related illness relative to younger adults (Basu et al. 2012). Extreme heat is associated with increases in cardiovascular and respiratory-related deaths among older adults (Bunker et al. 2016; Anderson and Bell 2011; Åström, Forsberg, and Rocklöv 2011). For seniors, illnesses and medications can also slow the body's cooling mechanisms (Stöllberger, Lutz, and Finsterer 2009). Although the increased use of air conditioning by elderly US residents has reduced their rates of heat-related deaths, the percentage of elderly individuals in the United States is increasing, which means more vulnerable individuals are being exposed to dangerous heat (Barnett 2007).

### **Bodies with Special Conditions and Needs**

People with medical conditions, both physical (such as respiratory or cardiovascular disease) and psychiatric, have an increased risk of heat-related death (Bouchama et al. 2007). In fact, many commonly prescribed medications inhibit the body's ability to regulate its temperature (Westaway et al. 2015). Being confined to bed or home, depending on the care of another person, or not understanding the need for water or cooling also significantly increases the risk of heat-related death (Bouchama et al. 2007). Underlying mental health disorders in



combination with alcohol or substance abuse can also contribute to higher heat-related-illness hospitalization rates and deaths (Schmeltz and Gamble 2017; Hansen et al. 2008). Exposure to extreme heat can cause complications for pregnant women and their developing babies (Basu, Sarovar, and Malig 2016; Basu, Malig, and Ostro 2010). Heat-induced dehydration during pregnancy can reduce blood flow to the uterus, which can lead to premature labor and delivery. It can also reduce blood flow to the placenta, which can lead to fetal nutrition deficiencies. In turn, stillbirths can result. An association between exposure to heat and both preterm delivery and stillbirths has been found among younger mothers, likely reflecting the effects of lower socioeconomic status (Basu, Sarovar, and Malig 2016; Basu, Malig, and Ostro 2010).

Source:

<https://www.ucsusa.org/sites/default/files/attach/2019/07/killer-heat-analysis-full-report.pdf>

## **Deposits**

It was confirmed in the last stakeholder meeting that 60% of APS ratepayers with delinquent balances from the summer moratorium have deposits associated with their accounts. At the 4:00:00 mark on this video [https://azcc.granicus.com/player/clip/3657?view\\_id=3](https://azcc.granicus.com/player/clip/3657?view_id=3), during the September 4<sup>th</sup> special open meeting with Don Brandt, **Froesher clearly states that ratepayer deposits will be applied to their balances coming out of the moratorium**. Sharon from APS then backtracks from what was said on Sept. 4<sup>th</sup> in the Stakeholder Meeting on October 10<sup>th</sup> starting at 1:29:00 mark [https://azcc.granicus.com/player/clip/3688?view\\_id=3](https://azcc.granicus.com/player/clip/3688?view_id=3) when Abhay Padgaonkar asks her about the deposit monies. It is completely contradictory to what APS Froescher committed to do "in the spirit of trying to make this work" and should be immediately remedied by this Commission along with proof/data that these deposits have been applied to summer moratorium balances.

I'm not sure if this Commission is aware, but I personally believe APS has been punishing those struggling to pay their bills with additional deposit demands for many years. When our economy tanked, I personally experienced this when I received a shutoff notice, along with an additional deposit demand, neither of which I was in a position to pay.

If you've never seen the complaints surrounding these additional deposit demands, even when people are simply late (more than 14 days) paying their bill, I'd strongly suggest reading some of these complaints **here**: <https://www.complaintsboard.com/arizona-public-service-company-aps-b107947>, **here**: <https://www.bbb.org/us/az/phoenix/profile/electric-companies/arizona-public-service-co-1126-17605/complaints>, **here**: [https://www.consumeraffairs.com/utilities/arizona\\_public\\_service.html](https://www.consumeraffairs.com/utilities/arizona_public_service.html) and **here's a story** about the practice from 2018: <https://www.abc15.com/news/let-joe-know/apa-ratepayers-complain-of-deposit-for-late-payments>.

### Service Schedule 1

3.8 Residential security deposits or other instruments of credit will automatically **expire or be credited or returned** to the Ratepayer's account after 12 consecutive months of service, if the Ratepayer has not been delinquent in payments **more than twice** and the Ratepayer has not filed bankruptcy in the last 12 months. **(No clue what the term "expire" means in this instance. As you can see in the rule below, this also doesn't line up, as this service schedule says "more than twice" - which would be 3 or more, whereas the Rule states "delinquent in the payment of two bills.")**

<https://www.aps.com/-/media/APS/APSCOM-PDFs/Utility/Regulatory-and-Legal/Regulatory-Plan-Details-Tariffs/Residential/Schedules/Schedule01TCForService.ashx>

**According to R14-2-203:** A utility may require a residential ratepayer to **establish or reestablish a deposit** if the ratepayer becomes **delinquent in the payment of two bills** within a 12-consecutive- month period or has been disconnected for service during the last 12 months. AND: The amount of a deposit required by the utility shall be determined according to the following terms: a. Residential ratepayer deposits shall not exceed two times that ratepayer's estimated average monthly bill.

What APS **says** (<https://www.aps.com/en/Residential/Account/Deposit-Policy>) and what APS **does** (see hundreds of complaints above) are two very different things.

I read the "establish or reestablish a deposit" rule in this way: a new ratepayer would in most cases be required to **establish** a deposit. Once established, as long as that ratepayer made their payments on time (or were not late in payments 2 or 3+ times depending on where you're looking which should be fixed) after 12 months of service, the deposit should be automatically credited to the account with interest. If there is a history of late payments after the original deposit is returned, then one may need to **reestablish** their deposit. I cannot find anywhere in the current ACC rules that allow for a utility to keep tacking on additional deposit money, which I refer to as the **APS Punish the Poor Fee**. What on earth are these deposits really for?

Here are some questions I would be asking APS (and potentially all regulated utilities) regarding deposit monies if I were ACC Staff and/or Commission:

- How many residential ratepayers currently have a deposit on their account?
- How does the utility determine when to do a 12 month review of residential ratepayer account to see if ratepayer qualifies to have deposit money returned? Is it from the time service is established?
- Are there any residential ratepayers who currently have deposits that are higher than what is currently allowed (two times average monthly bill)? If so, how many ratepayers? What is the total amount of money?
- How many residential ratepayers are currently on auto pay?



- How many residential ratepayers who've been on auto pay for at least 12 months currently have a deposit associated with their account?
- What is the current total amount of residential ratepayer deposit money being held by APS?
- Why are those residential ratepayers who pay late but aren't disconnected, required to pay an additional deposit?
- Prior to residential ratepayer disconnection, does APS ever apply the deposit to balance owed? If no, why not?

**It's interesting to look around the country at how various utilities (and Regulators) appear to be actually helping their ratepayers, versus harming them with regard to deposits. This Austin Energy list tied to deposits was especially interesting to me, and I hope would be interesting to Commissioners as well.**

#### **Getting Your Deposit Waived**

Effective May 16, 2018, residential ratepayers starting new services may be eligible to have their deposit waived if they meet one of the following criteria:

- Have a record of satisfactory compliance with Ratepayer Payment Standards on a previous City of Austin Utility account
- Provide a letter of reference from another electric, gas or water utility
- Provide a Landlord Letter of reference form showing at least one metered utility was included in the monthly rental amount
- Enrollment in Auto Pay and E-Bill
- Are 65 years of age or older
- Are service members returning after deployment
- Are victims of domestic abuse
- Qualify as displaced tenants eligible for tenant relocation assistance
- Any resident at the service address qualifies as medically indigent

In conclusion, I will once again remind you, Commissioners, that you were elected to protect the best interests of the public, not the utility behemoths. I am unable to count at this point the number of times I've watched APS stand before you and say one thing, then turn around and do the opposite. The application of deposits to outstanding summer moratorium balances is just one glaring example. It is wrong, and it is **your job** to be holding these multi-billion dollar utility monopolies accountable – **not mine**.

I would also ask that since RUCO has little to no public facing information, was a party to the last rate hike settlement agreement, and regularly holds behind-closed-doors “stakeholder” meetings, that you create a true volunteer-led, citizen ratepayer advisory committee to act as the watchdog for residential ratepayers. Myself and Abhay Padgoankar who served as the expert in my Complaint would be happy to be involved.

There also appears to be a staffing shortage at ACC, as I’ve been given this excuse numerous times while waiting months and months for public record requests to be fulfilled, which I don’t believe fits the “promptly furnished” law, which should be remedied to increase transparency and the public’s trust in this agency as soon as possible.

You as our elected Commissioners have the duty to protect hundreds of thousands of ratepayers and save Arizona lives, so I would implore you to do the work to dig into the contradictions in your own rules, be focused on creating meaningful and data-driven policy as we move forward, and stand up for our most vulnerable citizens.

I promise you that Arizonans are awake, paying attention, and will be expecting you to do the right thing. It’s time for you to put people before profits.